## Amendments to the Claims/Listing of Claims

Please amend claims 14, 21, 25 and 26, and cancel claims 15-20, 22, 23 and 27-33 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A method for modulating process(es) mediated by farnesoid X receptor polypeptides, said method comprising conducting said process(es) in the presence of an effective amount of at least one compound having the structure:

$$R^{2}$$
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 

wherein:

A is a C3 up to C8 branched chain alkyl or substituted alkyl group, a C3 up to C7 cycloalkyl or substituted cycloalkyl, an optionally substituted aryl or an optionally substituted heteroaryl,

X is -C(O)- or  $-CH_2$ -,

R is methyl or ethyl,

R<sup>1</sup> is H, hydroxy, alkoxy, benzoyloxy, mesityloxy, or -OCH<sub>2</sub>C(O)OC<sub>2</sub>H<sub>5</sub>,

R<sup>2</sup> is H or R<sup>2</sup> can cooperate with R<sup>3</sup> to form a benzopyran, wherein the pyran ring has the structure:

Me 
$$R^6$$
  $R^8$   $R^7$ 

wherein:

R<sup>6</sup> is not present if the pyran ring is unsaturated, or, if present, is selected from H, -OR, wherein R is alkyl or acyl, or R<sup>6</sup> can cooperate with R<sup>7</sup> to form a cyclic acetal, a cyclic ketal, or a cyclopropyl moiety, and

only one of R<sup>7</sup> and R<sup>8</sup> is present if the pyran ring is unsaturated, or R<sup>7</sup> and R<sup>8</sup> are independently H, carboxyl, cyano, hydroxy, alkoxy, thioalkyl, aryl, or R<sup>7</sup> and R<sup>8</sup> taken together comprise a carbonyl oxygen or an oxime nitrogen, or either R<sup>7</sup> or R<sup>8</sup> can cooperate with R<sup>6</sup> to form a cyclic acetal, a cyclic ketal, or a cyclopropyl moiety,

 $R^3$  can cooperate with  $R^2$  to form a benzopyran having the structure set forth above, or  $R^3$  is alkenyl, optionally substituted aryl or heteroaryl, or optionally substituted arylalkenyl or heteroarylalkenyl,

R<sup>4</sup> is H or hydroxy, and R<sup>5</sup> is H, hydroxy, alkoxy or aryloxy.

- 2. (Original) The method of claim 1 wherein said process mediated by farnesoid X receptor is cholesterol metabolism.
- 3. (Original) The method of claim 1 wherein said process mediated by farnesoid X receptor is the regulation of lipid homeostasis.
- 4. (Original) The method of claim 1 wherein R<sup>2</sup> and R<sup>3</sup> cooperate to form a benzopyran.

- 5. (Original) The method of claim 4 wherein A is cyclopropyl, X is -C(O)-,  $R^1$  is methoxy,  $R^6$  and  $R^7$  are absent, and  $R^4$ ,  $R^5$  and  $R^8$  are hydrogen.
- 6. (Original) The method of claim 4 wherein A is cyclopropyl, X is  $-CH_2$ -,  $R^1$  is methoxy,  $R^6$  and  $R^7$  are absent, and  $R^4$ ,  $R^5$  and  $R^8$  are hydrogen.
- 7. (Original) The method of claim 4 wherein A is cyclohexyl, X is -C(O)-,  $R^1$  is methoxy,  $R^6$  and  $R^7$  are absent, and  $R^4$ ,  $R^5$  and  $R^8$  are hydrogen.
- 8. (Original) The method of claim 4 wherein A is phenyl, X is -C(O)-,  $R^1$  is methoxy,  $R^6$  and  $R^7$  are absent, and  $R^4$ ,  $R^5$  and  $R^8$  are hydrogen.
- 9. (Original) The method of claim 4 wherein A is phenyl, X is -C(O)-,  $R^1$  is methoxy,  $R^6$  and  $R^7$  cooperate to form a dichlorocyclopropyl ring, and  $R^4$ ,  $R^5$  and  $R^8$  are hydrogen.
- 10. (Original) The method of claim 4 wherein A is cyclohexyl, X is -C(O)-, R<sup>1</sup> is methoxy, R<sup>6</sup> and R<sup>7</sup> cooperate to form a dichlorocyclopropyl ring, and R<sup>4</sup>, R<sup>5</sup> and R<sup>8</sup> are hydrogen.
  - 11. (Original) The method of claim 1 wherein R<sup>3</sup> is alkenyl.
- 12. (Original) The method of claim 11 wherein A is cyclohexyl, X is -C(O)-,  $R^1$   $R^2$ ,  $R^4$  and  $R^5$  are hydrogen, and  $R^3$  is -CH=CH-C(O)-O-tBu.
- 13. (Original) The method of claim 1 wherein R<sup>3</sup> is optionally substituted aryl or heteroaryl.

14. (Currently amended) The method of claim 13 wherein <u>said compound is</u>
selected from the group consisting of compounds wherein:

A is cyclohexyl,

X is -C(O)-,

R<sup>1</sup> R<sup>2</sup>, R<sup>4</sup> and R<sup>5</sup> are each hydrogen, and

R<sup>3</sup> is <u>selected from the group consisting of phenyl, p-thiomethyl-phenyl, m-methoxy-phenyl, m-acetyl-phenyl, 5-methyl-2-thiophene-yl, 5-acetyl-2-thiophene-yl, 4-dimethylamino-phenyl, and 2,3-(O-CH<sub>2</sub>-O)-phenyl.</u>

15.-20. Cancelled.

21. (Currently amended) The method of claim 13 wherein said compound is selected from the group consisting of compounds wherein:

A is isopropyl,

X is -C(O)-,

 $R^1 R^2$ ,  $R^4$  and  $R^5$  are <u>each</u> hydrogen, and

R<sup>3</sup> is 4-dimethylamino-phenyl, or 2,3-(O-CH<sub>2</sub>-O)-phenyl.

- 22.-23. Cancelled.
- 24. (Original) The method of claim 1 wherein R<sup>3</sup> is or optionally substituted arylalkenyl or heteroarylalkenyl.
- 25. (Currently amended) The method of claim 24 wherein said compound is selected from the group consisting of compounds wherein:

A is cyclohexyl,

X is -C(O)-, R<sup>1</sup> R<sup>2</sup>, R<sup>4</sup> and R<sup>5</sup> are each hydrogen, and

R<sup>3</sup> is <u>selected from the group consisting of</u> -CH=CH-phenyl, -CH=CH-p-methoxy-phenyl, -CH=CH-o-fluoro-phenyl, -CH=CH-m-fluoro-phenyl, and -CH=CH-p-fluoro-phenyl.

26. (Currently amended) The method of claim 24 wherein <u>said compound is</u> selected from the group consisting of compounds wherein:

A is isopropyl,

X is -C(O)-,

R<sup>1</sup> R<sup>2</sup>, R<sup>4</sup> and R<sup>5</sup> are <u>each</u> hydrogen, and

R<sup>3</sup> is <u>selected from the group consisting of</u> -CH=CH-phenyl, -CH=CH-o-fluoro-phenyl, and -CH=CH-p-fluoro-phenyl.

27.-35. Cancelled.

36. (Original) A method for the treatment of hypercholestemia, said method comprising administering to a subject in need thereof an effective amount of at least one compound having the structure:

$$R^2$$
 $R^3$ 
 $R^4$ 
 $R^5$ 
 $X - OR$ 

wherein:

A is a C3 up to C8 branched chain alkyl or substituted alkyl group, a C3 up to C7 cycloalkyl or substituted cycloalkyl, an optionally substituted aryl or an optionally substituted heteroaryl,

X is -C(O)- or  $-CH_2$ -,

R is methyl or ethyl,

R<sup>1</sup> is H, hydroxy, alkoxy, benzoyloxy, mesityloxy, or -OCH<sub>2</sub>C(O)OC<sub>2</sub>H<sub>5</sub>,

R<sup>2</sup> is H or R<sup>2</sup> can cooperate with R<sup>3</sup> to form a benzopyran, wherein the pyran ring has the structure:

wherein:

 $R^6$  is not present if the pyran ring is unsaturated, or, if present, is selected from H, -OR, wherein R is alkyl or acyl, or  $R^6$  can cooperate with  $R^7$  to form a cyclic acetal, a cyclic ketal, or a cyclopropyl moiety, and

only one of  $R^7$  and  $R^8$  is present if the pyran ring is unsaturated, or  $R^7$  and  $R^8$  are independently H, carboxyl, cyano, hydroxy, alkoxy, thioalkyl, aryl, or  $R^7$  and  $R^8$  taken together comprise a carbonyl oxygen or an oxime nitrogen, or either  $R^7$  or  $R^8$  can cooperate with  $R^6$  to form a cyclic acetal, a cyclic ketal, or a cyclopropyl moiety,

 $R^3$  can cooperate with  $R^2$  to form a benzopyran having the structure set forth above, or  $R^3$  is alkenyl, optionally substituted aryl or heteroaryl, or optionally substituted arylalkenyl or heteroarylalkenyl,

R4 is H or hydroxy, and

R<sup>5</sup> is H, hydroxy, alkoxy or aryloxy.

37. (Original) A method for the treatment of cholestasis, said method comprising administering to a subject in need thereof an effective amount of at least one compound having the structure:

$$R^2$$
 $R^3$ 
 $R^4$ 
 $R^5$ 
 $R^5$ 
 $R^5$ 
 $R^5$ 
 $R^5$ 

wherein:

A is a C3 up to C8 branched chain alkyl or substituted alkyl group, a C3 up to C7 cycloalkyl or substituted cycloalkyl, an optionally substituted aryl or an optionally substituted heteroaryl,

X is 
$$-C(O)$$
- or  $-CH_2$ -,

R is methyl or ethyl,

 $R^1$  is H, hydroxy, alkoxy, benzoyloxy, mesityloxy, or  $-OCH_2C(O)OC_2H_5$ ,

R<sup>2</sup> is H or R<sup>2</sup> can cooperate with R<sup>3</sup> to form a benzopyran, wherein the pyran ring has the structure:

$$\begin{array}{c|c}
Me & O & \nearrow & \nearrow & \nearrow \\
R^6 & H & R^8 & R^8
\end{array}$$

wherein:

 $R^6$  is not present if the pyran ring is unsaturated, or, if present, is selected from H, -OR, wherein R is alkyl or acyl, or  $R^6$  can cooperate with  $R^7$  to form a cyclic acetal, a cyclic ketal, or a cyclopropyl moiety, and

only one of  $R^7$  and  $R^8$  is present if the pyran ring is unsaturated, or  $R^7$  and  $R^8$  are independently H, carboxyl, cyano, hydroxy, alkoxy, thioalkyl, aryl, or  $R^7$  and  $R^8$  taken together comprise a carbonyl oxygen or an oxime nitrogen, or either  $R^7$  or  $R^8$  can cooperate with  $R^6$  to form a cyclic acetal, a cyclic ketal, or a cyclopropyl moiety,

 $R^3$  can cooperate with  $R^2$  to form a benzopyran having the structure set forth above, or  $R^3$  is alkenyl, optionally substituted aryl or heteroaryl, or optionally substituted arylalkenyl or heteroarylalkenyl,

R<sup>4</sup> is H or hydroxy, and

R<sup>5</sup> is H, hydroxy, alkoxy or aryloxy.